

Watersheds

A watershed is the land that water flows across or under on its way to a stream, river or lake and is nature's way of dividing up the landscape. New England includes many eco-systems that, by virtue of their ecological value, recreational value, or proximity to large populations, hold a special significance to us. EPA New England is focusing particular attention and resources on these special places. Working closely with our federal, state and local partners, these community based initiatives aredelivering tangible environmental improvements to these watershed areas.

► EPA Contact

Erik Beck (617) 918-1606 beck.erik@epa.gov



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Lake Champlain Basin



What Makes Lake Champlain Basin Special?

- ► Lake Champlain is a rich biological resource with the unparalleled beauty of rural farm and small town landscapes nestled among mountains.
- ▶It is the largest lake in New England and has been designated as part of a United Nations
 Biosphere Reserve. Through the Lake Champlain
 Special Designation Act, Congress has recognized the lake as a place worthy of protection.
- ► The lake has a rich concentration of underwater historical artifacts, and is considered by some to be the most historic body of water in North America.
- ► Economic impact of tourism along the lake is over \$154 million annually.

What are the Environmental Issues?

- ► High levels of phosphorus encourage algae blooms and excessive plant growth in parts of the lake.
- ▶ Persistent toxic contaminants are found in the lake's sediments and fish.
- ► Invasive, non-native aquatic plants and animals such as zebra mussels, water chestnuts, alewives, and milfoil—displace native species and reduce recreational values.

What are Some of the Goals?

- ► Reduce annual phosphorus loads to the lake by 57 metric tons before 2018.
- For 2002, keep area of water chestnut infestation to less than 53 miles.
- ▶ Restore rivers, streams, and surrounding floodplains in the Lake Champlain basin.
- ▶ Reduce pollution from toxic substances.

Progress/Goals for the Future

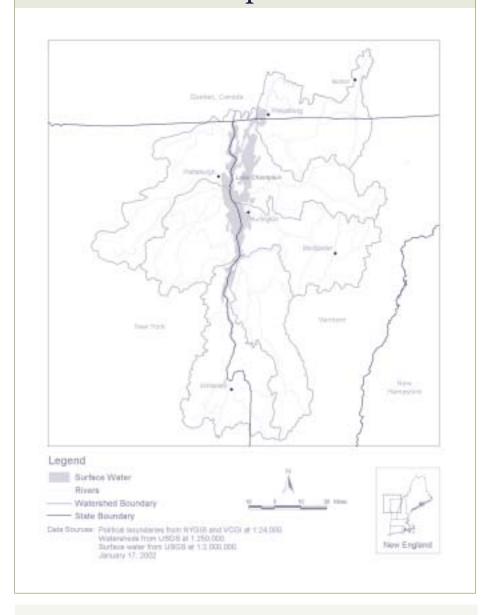
What Progress has Been Made?

- ► University of Vermont, with funding from EPA through LCBP, started development of a set of ecological indicators to help benchmark progress in implementing Lake Champlain's Management Plan.
- ►Over 40 pounds of mercury was removed from the Lake Champlain Basin by replacing 80 mercury-filled instruments at dairy farms with safe alternatives.
- ►In 2001, EPA funded the Lake Champlain Basin Program (LCBP) with about \$1.5 million dollars (NYDEC, VTANR, NEIWPCC) to assist their efforts.
- ► EPA gave \$736,000 to the Center for Lake Champlain for new exhibits and facilities.
- National Wildlife Federation held a stormwater management training program for towns in the basin.
- ▶ Vermont ANR, with funding from EPA, conducted a geomorphic assessment of the Lewis Creek watershed to help determine the cause of erosion and sediment discharge.
- ▶NY DEC removed 20,000 pounds of PCBs from Lake Champlain's Cumberland Bay by dredging 140,000 tons of material from a 50 acre site in Cumberland Bay at an approximate cost of \$35,000,000. EPA funded the study that found the contamination.

What Major Actions are Planned for 2002?

- ► Investigate new alternative manure management technology projects to reduce phosphorus loads into the water.
- ▶ Revise the Lake Champlain Management Plan.
- ▶ Develop options for reducing phosphorus loads into the lake.
- ► Continue water quality monitoring started in 1992.

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About the Lake Champlain Basin Program (LCBP):

The federal Lake Champlain Special Designation Act of 1990 created the LCBP to develop a comprehensive pollution prevention, restoration and control plan for the lake. Plan implementation by the LCBP is guided by the Lake Champlain Steering Committee, which represents diverse lake and basin interests. The program is administered by the US EPA and the states of New York and Vermont, and gets input from Vermont, New York and Quebec Citizen Advisory Committees, a Technical Advisory Committee, and an Education and Outreach Committee. Funding for the LCBP is provided primarily by the US Environmental Protection Agency (EPA), with additional funding by the National Park Service (NPS) and other agencies.

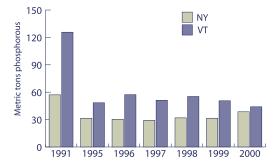
The LCBP was the recipient of a National Watershed Award for innovative local partnerships and voluntary initiatives that improve water quality by balancing a watershed's environmental and economic needs. The award was sponsored by CF Industries through the Conservation Fund.



Who are the Partners?

EPA New England • EPA Region 2 • US Agency of Commerce and Community Development • VT Agency of Natural Resources • VT Dept. of Agriculture, Food and Markets • NY Dept. of Environmental Conservation • NY Dept. of Agriculture and Markets • Province of Quebec • New England Interstate Water Pollution Control Commission • USACE • USFWS •USDA • USGS • NPS • NOAA • Sea Grant • Environmental Organizations • Watershed Associations • Lake Champlain Research Consortium • VT/NY/QUE Citizen Advisory Committees • Lake Champlain Chambers of Commerce • Center for Lake Champlain • Lake Champlain Maritime Museum • Champlain Basin Educational Initiative • 232 towns • Universities in NY/VT • WPTZ • Empire State Development • VT Agency of Transportation • NY State Dept. of Parks, Recreation, and Historic Preservation

U.S. Wastewater Loads to Lake Champlain



► Lake Champlain Basin Program (LCBP)

(802) 372-3213 (800) 468-5227 (in NY and VT only) P.O. Box 204 54 West Shore Road Grand Isle, VT 05458 www.lcbp.org lcbp@lcbp.org



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